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**EUROPEAN PATENT APPLICATION**

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 28.06.95 Bulletin 95/26

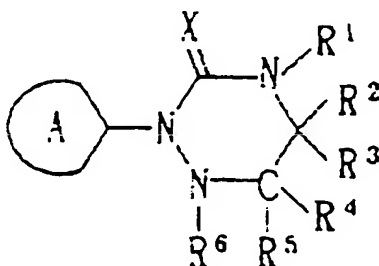
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(54) Triazine derivative, production and use thereof.

(57) The present invention provides a novel triazine derivative of the formula



wherein ring A is an optionally substituted aromatic group which be;

X is an oxygen or sulfur atom;

R<sup>1</sup> and R<sup>6</sup> are each a hydrogen atom or an

optionally substituted hydrocarbon residue or heterocyclic group which may bound through a heteroatom;

R<sup>2</sup> and R<sup>3</sup> are each independently a hydrogen atom, a halogen atom, or a group bound through a carbon, oxygen or sulfur atom, or taken together, represent =S;

R<sup>4</sup> and R<sup>5</sup> are each independently a hydrogen atom, a halogen atom, or a group bound through a carbon, oxygen, nitrogen or sulfur atom;

R<sup>1</sup> and R<sup>2</sup>, and R<sup>5</sup> and R<sup>6</sup>, may each bind together to form a chemical bond; provided that where ring A is a phenyl group having at least a halogen atom in position-2 or 4 and X is an oxygen atom, R<sup>4</sup> and R<sup>5</sup> do not conjointly represent a chemical bond and an antiprotozoan composition containing the same or salt thereof.



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## PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention EP 94 11 6173  
shall be considered, for the purposes of subsequent  
proceedings, as the European search report

### DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
D,X  Y	EP-A-0 457 015 (BAYER AG) 21 November 1991  *especially when R3 is: H* * the whole document *	1,2, 15-17, 24,27, 28,33,34  1-29,33, 34	C07D401/10 C07D417/10 C07D403/12 C07D401/04 C07D413/10 C07D253/07 C07D253/06 C07D253/075 A61K31/53
D,X  Y	EP-A-0 476 439 (BAYER AG) 25 March 1992  *especially when R5=H* * the whole document *  ---  -/--	1,2, 15-17, 24,27, 28,33,34  1-29,33, 34	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			C07D A61K

### INCOMPLETE SEARCH

The Search Division considers that the present European patent application does not comply with  
the provisions of the European Patent Convention to such an extent that it is not possible to carry  
out a meaningful search into the state of the art on the basis of some of the claims

Claims searched completely :

Claims searched incompletely :

Claims not searched :

Reason for the limitation of the search:

see sheet C

Place of search

MUNICH

Date of completion of the search

19 December 1994

Examiner

Scruton-Evans, I

#### CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone  
Y : particularly relevant if combined with another  
document of the same category  
A : technological background  
O : non-written disclosure  
P : intermediate document

T : theory or principle underlying the invention  
E : earlier patent document, but published on, or  
after the filing date  
D : document cited in the application  
L : document cited for other reasons

& : member of the same patent family, corresponding  
document



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Application Number  
EP 94 11 6173

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
D,X	EP-A-0 383 285 (HOECHST AG) 22 August 1990	1,2, 12-16, 23,27, 28,33	
	*especially when R4=H* * the whole document *		
Y		1-29,33, 34	
X	GB-A-1 562 935 (HOECHST AG) 19 March 1980	1,2,14, 27,28, 33,34	
	* the whole document *		
Y		1-29,33, 34	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
X	DE-A-25 32 363 (BAYER AG) 3 February 1977	1,2, 15-17, 27,28, 33,34	
	* the whole document *		
Y		1-29,33, 34	
X	US-A-4 631 278 (G.M.BOECKX) 23 December 1986	1,2, 15-17, 24,27, 28,33,34	
	* the whole document *		
Y		1-29,33, 34	
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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
D,X	J. MED. CHEM., vol.22, no.12, 1979 pages 1483 - 1487 M.W.MILLER ET AL 'Anticoccidial derivatives of 6-Azaauracil' *see whole document and especially Table I*	1-4,6, 27-29	
Y	---	1-29,33, 34	
X	WO-A-86 00072 (FMC CORPORATION) 3 January 1986 * the whole document *	1,2,33, 34	
X	SYNTHETIC COMMUNICATIONS, vol.21, no.15, 1991 pages 1695 - 1703 J DANIEL ET AL 'Cyclisation of chlorosulfonyl isocyanate with phenylhydrazones' *see compounds 6a-6c*	1,2	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
X	INDIAN JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.3, October 1993 pages 121 - 126 R.M.ABDEL-RAHMAN ET AL 'Synthesis and biological activity of some new heterocyclic systems' *see compound XIV*	1,3	
X	TETRAHEDRON, vol.48, no.42, 1992 pages 9295 - 9304 A.ELGHANDOUR ET AL 'Studies with polyfunctionally substituted heteroaromatics' *see compound 13*	1,2	
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Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	JUSTUS LIEBIG ANN. CHEM., vol.12, 1978 pages 2033 - 2043 H.GNICHTEL 'Isomere Heterocyclen durch Cyclisierung von syn- und anti- alpha Aminohydrazonen' *see compounds 4a and 4b* ---	1,2	
X	JUSTUS LIEBIG ANN. CHEM., vol.713, 1968 pages 151 - 161 A.MUSTAFA ET AL 'Das Verhalten von Oxazolinonen-(5) und Thiazolinonen-(5) gegen N-Phenyl-hydroxylamin und Phenylhydrazin' *see compound 20c* -----	1,2	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)



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### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet -B-

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respects of which search fees have been paid, namely claims:
- ☒ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims.

namely claims: 1-29, 33, 34



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EP 94 11 6173 -B-

#### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims 1-29, 33, 34
2. Claim 35: This claim is an independent claim for a process which has no relationship to the end products of claim 1, and has no technical parameters



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-C-

Although all of the claims 1-29,33,34 have been searched, it is not possible to cite all of the X documents found, as the possibility of R<sup>3</sup> being -OH with R<sup>1</sup> and R<sup>2</sup> as a double bond is included within the claim, and this is the tautomeric form of the widely known 3,5 diones (see description, page 18, line 5).  
Also, the broad terms "group bound through C,O,N,S", "hydrocarbon residue", "optionally substituted", etc. encompass very many known compounds.